

External Challenges: Other Issues

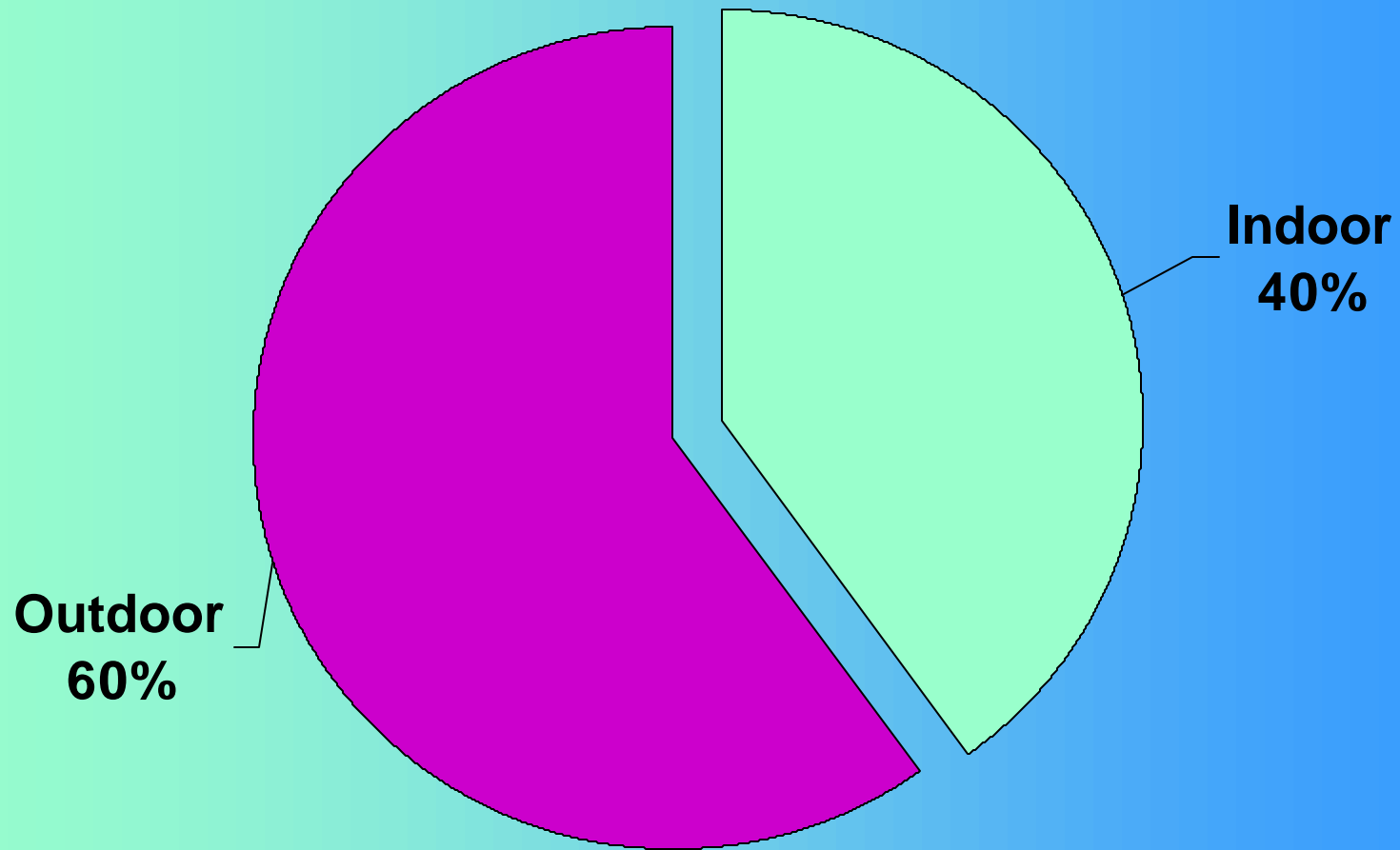
Source Water Supply
Achieving Competitive Efficiency

New Source Development

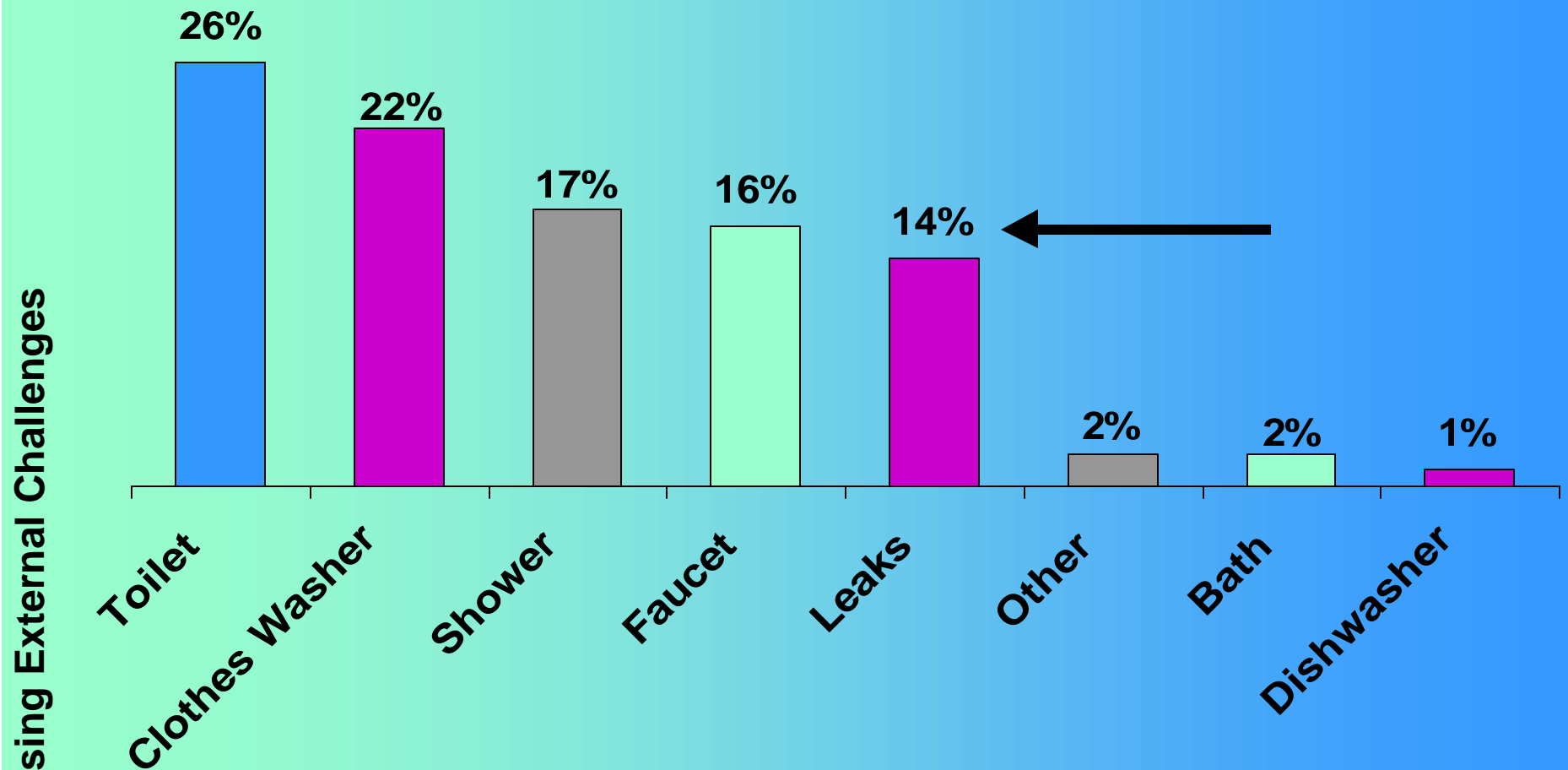
- Surface Sources
 - Many environmental, regulatory, and social barriers
- Groundwater Sources
 - Aquifers are limited and may be overdrawn

Source Conservation Is a Better Option!

Where Do Residential Customers Use Water?



Where Do Residential Customers Use Water Indoors?



Indoor Leaks

- Conservation Potential
 - 10% of homes responsible for 58% of leaks
 - AWWA estimates households can reduce daily per capita water use by about 30% by installing more efficient water fixtures and regularly checking for leaks.

Distribution System Leak Detection

- Leak Detection and Repair Saves Water and Expenditures Over the Long Run
- Water Accounting Is the First Step
- If $>10\%$ Unaccounted-for Water, Leak Detection Is Recommended
- Investment Pays off Over Time to Repair Leaks



Achieving Competitive Efficiency

New Players

- Foreign Companies
 - British (Thames)
 - French (Vivendi)
- Energy Companies (subsidiaries)
- Converged Utilities
- Non-utilities -- Vendors



The Public Sector Responds

- Re-engineering
- Improved Efficiency
- “Publicization”

Implications for Small Systems

- Performance Expectations for Industry as a Whole Will Rise
- Shift in Focus to Water Supply as a Business (Especially Efficiency)
- More Opportunities for Partnerships